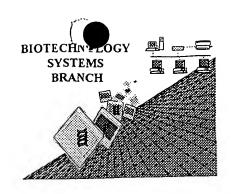
05-05-01

## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/753, /39Source: 0/PEDate Processed by STIC: 1/23/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

#### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

### ERROR DETECTED SUGGESTED CORRECTION SERIAL NUMBER: 09/1/3

ΔΤΤΛ	I- NEW RULES CASES: I	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1	Wrapped Nucleics	The number/text at the end of each line "wrapped" down to the next line.
	_ Tropped Trodicios	This may occur if your file was retrieved in a word processor after creating it.
		Please adjust your right margin to .3, as this will prevent "wrapping".
2	Wrapped Aminos	The amino acid number/text at the end of each line "wrapped" down to the next line.
	•	This may occur if your file was retrieved in a word processor after creating it.
		Please adjust your right margin to .3, as this will prevent "wrapping".
3	Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes spaces.
4	Misaligned Amino Acid	The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
· <del></del>	Numbering	between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
5	Non-ASCII	This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
	•	Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
6	Variable Length	Sequence(s) contain n's or Xaa's which represented more than one residue.
		As per the rules, each n or Xaa can only represent a single residue.
		Please present the maximum number of each residue having variable length and
		indicate in the (ix) feature section that some may be missing.
7	Patentin ver. 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
		sequence(s) Normally, Patentin would automatically generate this section from the
		previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
		to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
		sections for Artificial or Unknown sequences.
8	Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
	(OLD RULES)	(2) INFORMATION FOR SEQ ID NO:X:
		(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
		(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
		This sequence is intentionally skipped
		Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
9	Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
	(NEW RULES)	<210> sequence id number
		<400> sequence id number
		000
0	Use of n's or Xaa's	Use of n's and/or Xaa's have been detected in the Sequence Listing.
	(NEW RULES).	Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
	,	In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
1	Use of <213>Organism	Sequence(s) are missing this mandatory field or its response.
	(NEW RULES)	
2	Use of <220>Feature	Sequence(s) are missing the <220>Feature and associated headings.
	(NEW RULES)	Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
	/	Please explain source of genetic material in <220> to <223> section.
	- / (	(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
3	Patentin ver. 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted

Instead, please use "File Manager" or any other means to copy file to floppy disk.

Title, Testitting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).

OIPE

```
M1-3
                      RAW SEQUENCE LISTING
                                                                 DATE: 01/23/2001
                      PATENT APPLICATION: US/09/753,139
                                                                 TIME: 10:38:55
                                                                                  Does Not Comply
                      Input Set : A:\ES.txt
                      Output Set: N:\CRF3\01232001\I753139.raw
                                                                            Corrected Diskette Needed
      3 <110> APP LCANT: Quirk, Stephen
              Tyrrell, David
       6 <120> TITLE OF INVENTION: Design and Use of Advanced Zinc Chelating Peptides to Regulate Matrix
               Metalloproteinases
                                                                       (Global eva)
       9 <130> FILE REFERENCE: 44039-227522 11301-0200
(a) > 11 <140 > CURRENT APPLICATION NUMBER: US/09/753,139 
-> 11 <141 > CURRENT FILING DATE: 2000-12-29
                                                            Per 1.823 of new Sequerce Rules,
     11 <160> NUMBER OF SEQ ID NOS: 10
     13 <170> SOFTWARE: PatentIn version 3.0
                                                          the only valid (2137 response are:
Unknown, Artificial Sequence, or
     15 <210> SEQ ID NO: 1
     16 <211> LENGTH: 7
     17 <212> TYPE: PRT
     18 <213> ORGANISM: Synthetic Peptide
                                                                 scientific name (Genus/species)

(one of the three)

(see circled portion of
them 12 on Euro humany

Sheet)
     20 <220> FEATURE:
     21 <221> NAME/KEY: VARIANT
     22 <222> LOCATION: (2)..(2)
     23 <223> OTHER INFORMATION: X = Ser or Thr
     26 <220> FEATURE:
     27 <221> NAME/KEY: VARIANT
     28 <222> LOCATION: (4)..(4)
     29 <223> OTHER INFORMATION: X = Ser, Ala or Val
     32 <400> SEQUENCE: 1
34 Cys Xaa Cys Xaa Pro His Pro
     35 1.
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 12
     39 <212> TYPE: PRT
40 <213> ORGANISM: Synthetic Peptide
     42 <220> FEATURE:
     43 <221> NAME/KEY: VARIANT
     44 <222> LOCATION: (1)..(1)
     45 <223> OTHER INFORMATION: X = Ile or Val
     48 <220> FEATURE:
     49 <221> NAME/KEY: VARIANT
     50 <222> LOCATION: (2)..(2)
     51 <223> OTHER INFORMATION: X = Glu, Gln or Arg
     54 <220> FEATURE:
     55 <221> NAME/KEY: VARIANT
     56 <222> LOCATION: (3)..(3)
     57 <223> OTHER INFORMATION: X = Phe or Tyr
     60 <220> FEATURE:
     61 <221> NAME/KEY: VARIANT
     62 <222> LOCATION: (4)..(4)
     63 <223> OTHER INFORMATION: X = Ile or Val
```

### **BEST AVAILABLE COPY**

66 <220> FEATURE:

67 <221> NAME/KEY: VARIANT 68 <222> LOCATION: (5)..(5)

```
RAW SEQUENCE LISTING
                                                               DATE: 01/23/2001
                     PATENT APPLICATION: US/09/753,139
                                                              TIME: 10:38:55
                     Input Set : A:\ES.txt
                     Output Set: N:\CRF3\01232001\I753139.raw
    69 <223> OTHER INFORMATION: X = Tyr or His
    72 <220> FEATURE:
    73 <221> NAME/KEY: VARIANT
    74 <222> LOCATION: (7)..(7)
    75 <223> OTHER INFORMATION: X = Ala, Pro or Glu
    78 <220> FEATURE:
    79 <221> NAME/KEY: VARIANT
    80 <222> LOCATION: (8)..(8)
    81 <223> OTHER INFORMATION: X = Pro, Phe or Ala
    84 <220> FEATURE:
    85 <221> NAME/KEY: VARIANT
    86 <222> LOCATION: (9)..(9)
    87 <223> OTHER INFORMATION: X = Ser, Asp or Met
    90 <220> FEATURE:
    91 <221> NAME/KEY: VARIANT
    92 <222> LOCATION: (10)..(10)
    93 <223> OTHER INFORMATION: X = Ala or Ser
    96 <220> FEATURE:
    97 <221> NAME/KEY: VARIANT
    98 <222> LOCATION: (11)..(11)
    99 <223> OTHER INFORMATION: X = Val or Leu
    102 <220> FEATURE:
    103 <221> NAME/KEY: VARIANT
    104 <222> LOCATION: (12)..(12)
    105 <223> OTHER INFORMATION: X = Cys or Gly
108 <400> SEQUENCE: 2
(1) Xaa Xaa Xaa Xaa Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa
                       5
    113 <210> SEQ ID NO: 3
    114 <211> LENGTH: 9
                                                        ) This is not a nucleotide sequence
see p. I regarding (2137 response
    115 <212> TYPE: PRT
    116 <213> ORGANISM: Synthetic Oligonucleotide
118 <220> FEATURE:
    118 <220> FEATURE:
    119 <221> NAME/KEY: VARIANT
    120 <222> LOCATION: (1)..(1)
    121 <223> OTHER INFORMATION: X = Met, Val or Leu
    124 <220> FEATURE:
    125 <221> NAME/KEY: VARIANT
    126 <222> LOCATION: (2)..(2)
    127 <223> OTHER INFORMATION: X = His, Phe or Tyr
    130 <220> FEATURE:
    131 <221> NAME/KEY: VARIANT
    132 <222> LOCATION: (3)..(3)
    133 <223> OTHER INFORMATION: X = Ile or Thr
    136 <220> FEATURE:
    137 <221> NAME/KEY: VARIANT
    138 <222> LOCATION: (4)..(4)
    139 <223> OTHER INFORMATION: X = Thr, His or Gly
    142 <220> FEATURE:
```

```
RAW SEQUENCE LISTING
                                                                          DATE: 01/23/2001
                           PATENT APPLICATION: US/09/753,139
                                                                         TIME: 10:38:55
                           Input Set : A:\ES.txt
                           Output Set: N:\CRF3\01232001\1753139.raw
        143 <221> HAME/KEY: VARTANT
        144 <222> LOCATION: (5)..(5)
        145 <223> OTHER INFORMATION: X = Leu or Thr
        148 <220> FEATURE:
        149 <221> NAME/KEY: VARIANT
        150 <222> LOCATION: (7)..(7)
        151 <223> OTHER INFORMATION: X = Asp, Ash or Ser
        154 <220> FEATURE:
        155 <221> NAME/KEY: VARIANT
        156 <222> LOCATION: (8)..(8)
        157 <223> OTHER INFORMATION: X = Phe or Tyr
        160 <220> FEATURE:
        161 <221> NAME/KEY: VARIANT
        162 <222> LOCATION: (9)..(9)
        163 <223> OTHER INFORMATION: X = Ile or Val
        166 <400> SEQUENCE: 3
() (--> 168 Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
        169 1...
                              5
       1.76 <400> SEQUENCE: 4

1.76 <400> SEQUENCE: 4

1.78 Cys Ser Ala Val Pro Val His

1.79 1 5

1.81 <210> SEQ ID NO: 5

1.82 <21.1> LENGTH: 7

1.83 <21.2> TYPE: PRT

1.84 <213> ORGANISM Synthetic Peptide PRT

1.86 <400> SEQUENCE:

1.88 Asp Ser Ala Val Pro Val His

1.89 1
        171 <210> SEQ ID NO: 4
        189 1
        191 <210> SEQ ID NO: 6
        192 <211> LENGTH: 9
        193 <212> TYPE: PRT
       194 <213> ORGANISM: Synthetic Peptide
196 <400> SEQUENCE:
        198 Ile Tyr Thr Ala Cys Met Ser Ala Val
        199 1
        201 <210> SEQ ID NO: 7
        202 <211> LENGTH: 7
        203 <212> TYPE: PRT
        204 <213> ORGANISM: Synthetic Peptide
        206 <400> SEQUENCE: 7
        208 Val His Thr His Leu Cys Asp
       209 1
       211 <210> SE() ID NO: 8
       212 <211> LENGTH: 5
       .213 <212> TYPE: PRT
```



RAW SEQUENCE LISTING DATE: 01/23/2001 PATENT APPLICATION: US/09/753,139 TIME: 10:38:55

Input Set : A:\ES.txt

Output Set: N:\CRF3\01232001\I753139.raw

```
214 <213> ORGANISM: Synthetic Peptide
216 <400> SEQUENCE: 8
218 Cys Thr Cys Val Pro
219 1
221 <210> SEQ ID NO: 9
222 <211> CENGTH: 4
223 <212> TYPE: PRT
224 <213> ORGANISM: Synthetic Peptide
226 <400> SEQUENCE: 9
228 Cys Asp Tle Cys
229 1
231 <210> SEO ID NO: 10
232 <211> LENGTH: 5
233 <212> TYPE: PRT
234 <213> ORGANISM: Synthetic Peptide
236 <400> SEQUENCE: 10
238 His Thr Ile Thr His
239 1
```





VERIFICATION SUMMARY
PATENT APPLICATION: US/09/753,139

DATE: 01/23/2001 TIME: 10:38:56

Input Set : A:\ES.txt

Output Set: N:\CRF3\01232001\1753139.raw

 $L:11\ M:270\ C:$  Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:168 N:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3